

SECTOR 1

THE STRAIT OF JUAN DE FUCA

Plan.—This sector describes the N side of the Strait of Juan de Fuca and the S coast of Vancouver Island, from Cape Beale to Discovery Island.

General Remarks

1.1 The Strait of Juan de Fuca separates the S coast of Vancouver Island from the N coast of the State of Washington.

The entrance of the strait lies between Cape Flattery (48°23'N., 124°44'W.) and Carmanah Point (48°37'N., 124°45'W.). At the E end of the strait, several navigable passages lead N and NW to the Strait of Georgia and Queen Charlotte Sound.

The strait is deep and free of dangers in the fairway. The coasts are marked by lights; radiobeacons are situated at Cape Beale and Tatoosh Island. There are few dangers in the seaward approaches to the strait.

Cape Flattery, a bold and lofty headland, is reported to be radar conspicuous. An outer approach lighted buoy, equipped with a racon, is moored about 6 miles N of this cape.

The rocks, lying close off the cape, are marked by a lighted buoy moored about 0.3 mile NW. Tatoosh Island, lying close NW of Cape Flattery, is marked by a light.

Note.—The S coast of the strait and the adjacent waters of the State of Washington, along with the navigable channels leading S from the Strait of Juan de Fuca to Puget Sound, are described in United States Coast Pilot 7, Pacific Coast.

Winds—Weather.—Sea fog is sometimes very dense in the vicinity of the entrance of the strait and may last for days at a time. It is usually accompanied by calms or light airs from the NW.

The fog decreases, both in density and frequency, E along the strait. Occasionally, the fog stands before the entrance like a wall. Vessels entering the strait may run through it into clear weather, even before passing Cape Flattery. As a general rule, the fog is more likely to extend farther into the strait along the S shore than along the N shore. It may reach the W shore of Admiralty Inlet when the N shore of this wide part of the strait is clear.

Fog occurs with almost equal frequency over the strait from October through July. The greatest frequency is during August and September.

Occasionally, smoke from forest fires reduces visibility to less than 5 miles in the strait. The smoke is usually cleared by rain.

The wind often blows in or out of the strait following the contour of the coasts. It blows in if the open coastal winds are NW to SW, as most frequently happens in the summer months; and blows out during the SE gales of winter.

When the seas raised by the winds blowing out of the strait meet the SW swell at the entrance, heavy confused seas are the result. The neighboring coast of Vancouver Island, particularly between Carmanah Point and Port San Juan, becomes a hazardous lee shore for sailing vessels and small craft.

Fog is sometimes dense in the approaches to, and to a lesser extent within, the strait. Vessels approaching the strait in thick weather are advised to pass S of Swiftsure Bank, because of the numerous fishing craft, most of which cannot be detected by radar. Cape Flattery and the off-lying rocks should be passed at a distance of at least 3 miles, as strong tidal currents set towards the cape and there are dangerous tide rips in this area. A long, rolling swell often sets onto the coast to the S of the cape. In thick weather, vessels should not proceed inside the 90m curve until a reliable position has been obtained.

Tides—Currents.—In the vicinity of Swiftsure Bank, the tidal current is distinctly rotary, turning clockwise twice each day. The set is E at HW and W at LW. The tidal current has a rate of less than 1 knot. Observations indicate the existence of a permanent current setting NW, with an average rate of 0.5 knot.

The NW currents are considerably stronger than the SE. A NW set, with a rate of 2 knots, occurs at times with SE winds, while a SE set, with a rate of up to 1.5 knots, does not occur except with strong W or NW winds. The greatest rate observed in this locality was 3 knots.

Tide rips occur off the prominent points and in the vicinity of banks. They are especially heavy along the N shore of the strait, between Beechey Head and Esquimalt. Under certain conditions, these tide rips can be dangerous to small vessels. The tidal currents are often strong and irregular throughout the strait and its inlets.

A result of the diurnal characteristics of the tides in the vicinity of the SE end of Vancouver Island is that the tidal currents are very irregular in the inlets along this coast.

At night, or in thick weather, vessels should be certain of their latitude when nearing the strait. From the W, the 330m curve is a good guide to the approximate longitude and the distance offshore.

In Plumper Passage and Hecate Passage, the flood tidal current begins immediately after LW by the shore and runs for 3 hours 45 minutes, after which there is slack water for a short period. The ebb tidal current then runs until LW by the shore, or for about 7 hours. Velocities of 3 to 5 knots occur.

In Baynes Channel, a SW current occurs 1 hour 20 minutes and 1 hour 30 minutes, respectively, after the predicted times of HW and LW at Victoria. There is only one predicted HW and LW at Victoria during those 24 hours. The duration of the SW set is quite short. The tidal currents are reported to be strongest on the SE side of the channel.

At the E end of the Strait of Juan de Fuca, the general set of the tidal current is from Race Rocks towards Discovery Island, and reverse. In the intermediate positions, the set is variable. In the vicinity of Race Rocks, the tidal current attains a velocity of 4 to 6 knots at times and dangerous tide rips are often formed. Both the times of HW and LW, indicating the turn of the tidal current, are very irregular. The duration of slack on the S side of Race Rocks is about 15 minutes, on the average.

Off the W entrance of the Strait of Juan de Fuca, within 25 or 30 miles of Cape Flattery and the Vancouver Island coast, a NW current sets across the entrance. This current should be guarded against, especially during the winter when SE and S gales prevail. The NW current is augmented by the W (ebb) tidal current setting out of the strait. It is also drawn to the N and E by the flood tidal current setting N across the entrance.

Within the entrance and as far E as 124°W, the E (flood) tidal current sets towards the Vancouver Island shore. It attains a greater velocity on the N side of the strait, as far E as Race Rocks, than on the S side and turns 1 hour 30 minutes to 2 hours 30 minutes earlier on the N side. Conversely, the W (ebb) tidal current is stronger on the S side of the strait. Vessels frequently take advantage of this effect when the tidal currents in the fairway of the strait are adverse.

The flood tidal current rounds Cape Flattery and Duntze Rock, with a velocity of 2 to 4 knots, and continues strong to abreast Race Rocks. It varies with the force and direction of the wind and the range of the tide. The current accelerates near the coast and in the entrances of channels.

Tides in the waters off the SE end of Vancouver Island are diurnal in type and subject to diurnal inequality both as to time and height. They are influenced most when the moon is at maximum declination and least when the moon is on the celestial equator.

Regulations.—For information on regulations concerning the Western Canada Traffic Zone, Vessel Traffic Services, and Pilotage, see Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia. Details of services are also provided in United States Coast Pilot 7, Pacific Ocean.

Canadian modifications to 72 COLREGS are applied in waters under Canadian jurisdictions. See Pub. 120, Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia for further information.

The waters described in this sector lie within the Vancouver Vessel Traffic Service (VTS) System. Vessels must contact the Vancouver VTS Control by VHF and report their position at each Calling-In-Point (CIP), by CIP name and sector, as follows:

CIP	Name	Sector	Remarks
1	Zone Limit	Change	See note 1.
3	Race Rock	Change	See note 1.
4	Bouy VH	1	
5	Hein Bank	Change	See note 1.
6	Turn Point	1	
7	East Point	1	
8	Patos Island	Change	See note 1.
9	Portlock Point	1	
10	Peile Point	1	
11	Active Pass	1	
12	Sandheads	Change	
12A	Woodward Island (Crown Forest)	2	

CIP	Name	Sector	Remarks
12B	La Farge	2	
12C	Shoal Point	Change	
13	West Porlier Pass	1	
14	East Porlier Pass	1	
15A	Iona	Change	
15B	Roger Curtis	Change	
15C	Gower Point	Change	
16	Halkett Point	3	
17	Grace Island	3	
18	Crown Point/Point Atkinson	3	
19	Dundarave	3	See note 2.
20	Vanterm	3	See note 3.
21	Berry Point	3	See note 4.
22	Roche Point	3	
23	Entrance Island/Five Fingers Island	1	
24	Ballenas Island/ Merry Island/Wel- come Passage	Change	See note 5.
25	Cape Lazo/Powell River	4	See note 6.
26	Cape Mudge	4	See note 7.
27	Steep Island	4	See note 8.
28	Separation Head	4	See note 9.
29	Cinque Island	4	See note 10.
30	Ripple Point	4	
31	Vansittart Point	4	
32	Fanny Island	4	
33	Boat Bay	4	
34	Lizard Point	4	
35	Lewis Point	4	
36	Pulteney Point	4	
37	Doyle Island	4	
38	Pine Island	4	
39	Cape Caution/Tri- angle Island	4	
40	Cape Scott	Change	

Notes:

- 1. Administered by Seattle and Tofino Traffic (CVTS).
- 2. Eastbound report only.
- 3. See paragraph 3.17 for further information on the Second Narrows Movement Restricted Area.

Notes (continued):

- 4. Westbound report only.
- 5. When northbound, mariners shall indicate whether their route is through Stevens Passage, Sabine Channel, Malaspina Strait, or Welcome Passage or is W of Sisters.
- 6. When southbound, mariners shall indicate whether their route is through Malaspina Strait, Sabine Channel, or Stevens Passage, or is W of Sisters.
- 7. If northbound, mariners shall report ETA for Steep Island and Maud Island Light.
- 8. If northbound, mariners shall report ETA for Separation Head and update ETA for Maud Island Light, if any change.
- 9. If southbound, mariners shall report ETA for Steep Island and update ETA for Maud Island Light, if any change.
- 10. If southbound, mariners shall report ETA for Separation Head and Maud Island Light.

Call signs and frequencies for each sector are, as follows:

Sector	Call sign	VHF channel	Remarks
1	Seattle Traffic	5A	Only for CIP 1 and 3.
1	Victoria Traffic	11	Remainder of Sector 1 CIPs.
2	Victoria Traffic	74	
3	Vancouver Traffic	12	
4	Comox Traffic	71	

Caution.—Numerous fishing vessels may be encountered within the Strait of Juan de Fuca, from the end of July to the end of October.

Swiftsure Bank (48°34'N., 125°00'W.), with a least depth of 33m, lies off the mouth of the strait. From April 15 to October 31, numerous fishing vessels may be encountered in the vicinity of this bank, about 15 miles NW of Cape Flattery, and on La Perouse Bank, lying 30 miles WNW.

Vessel movements in the Vancouver Traffic Zone may be restricted when the following vessels are underway:

- 1. A loaded tanker or tank barge 10,000 grt of over.
- 2. A vessel carrying dangerous cargo.
- 3. A vessel which is considered to be navigating with difficulty.

Cape Beale to Carmanah Point

1.2 Cape Beale (48°47'N., 125°13'W.) is bold, rocky, and heavily wooded. It is reported to be a poor radar target. A light is shown from a tower standing on this cape.

From Cape Beale, the shores of Vancouver Island are mostly steep-to, rising inland to densely-wooded hills. The coast trends SE for 75 miles to Race Rocks and all fringing shoals lie within the 100m curve.

Between Cape Beale and Race Rocks, extensive logging operations and forest fires have left noticeable bare patches. The densely-wooded shores on the S side of the strait rise to the perpetually snow-clad Olympic Mountains. Several conspicuous peaks, which may best be seen on the chart, stand within the N entrance of the strait.

Pachena Point (48°43'N., 125°06'W.), steep-to, is located 6 miles SE of Cape Beale. A main light is shown from a structure, 12m high, standing on the point. A prominent white house, with a red roof, is situated close W of the light.

A prominent waterfall, rare for this region, marks the mouth of the Tsusiat River, about 7 miles ESE of Pachena Point.

Pachena Bay (48°47'N., 125°08'W.) is entered 3 miles NW of the Pachena Point. Seabird Rocks, above-water, lie in the entrance of this open bay, which is obstructed by dangers. A light is shown from a structure standing on the largest rock. A heavy sea usually rolls into the bay and passage, without local knowledge, is unsafe. Nitinat Lake, an inlet, is entered about 11 miles ESE of Pachena Point. It is used as a refuge by fishing craft with local knowledge. Clo-oose, an abandoned village, is situated on the coast, 1.3 miles ESE of the inlet. A lighted buoy is moored about 1 mile S of this village.

Carmanah Point (48°37'N., 124°45'W.), located 15.5 miles SE of Pachena Point, forms the N entrance point of the Strait of Juan de Fuca and is conspicuous. Bonilla Point, 1.8 miles SE of this point, slopes down to the strait and is fronted by reefs extending up to about 0.6 mile W and S.

A main light is shown from a tower, 9m high, standing on Carmanah Point. A fishing light is occasionally shown from Bonilla Point.

Caution.—Choppy and confused seas, dangerous to small vessels, are raised off Carmanah Point and Bonilla Point when SW swells at the entrance meet wind-driven seas blown out of the strait.

1.3 Port San Juan (48°33′N., 124°26′W.), an inlet, is entered between Owen Point and San Juan Point, 1.5 miles ESE. A light is shown from a structure standing on San Juan Point; the fairway is marked by a lighted buoy moored about 0.8 mile SE of Owen Point.

This inlet appears from seaward as a conspicuous, deep gap between two mountain ranges and is open to SW winds, seas, and swell. Above-water rocks lie close off both sides of the entrance. The entrance fairway is clear of dangers and leads through the inlet in a least depth of 10m.

Port Renfrew is situated within a small cove, about 2 miles NE of San Juan Point. Local knowledge is required to enter this cove. There is a small wharf, with a depth of 4.6m alongside.

Anchorage can be taken throughout the inlet, in depths of 11 to 16.5m, sand. In the advent of SW gales, vessels should seek a more sheltered anchorage.

Sheringham Point (48°23'N., 123°55'W.), densely-wooded and inconspicuous, lies 23.5 miles ESE of Port San Juan. This point, which is marked by a light, is the location of the Canadian Coast Guard Victoria Rradio Station.

A conspicuous electric power plant, with an outfall pipeline, is situated at a coastal village, about 6 miles WNW of Sheringham Point.



Cape Beale Light

 ${\it Main\ photo\ and\ bottom\ inset\ copyright\ Mike\ Mitchell}$



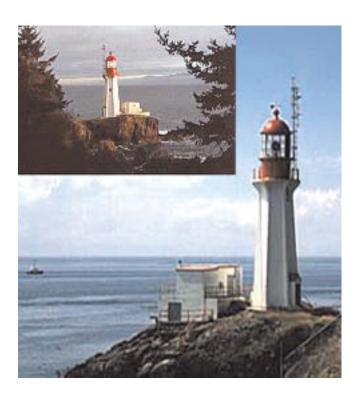
Pachena Point Light

Photos copyright Mike Mitchell



Main photo copyright Mike Mitchell

Carmanah Point Light



Inset copyright Chris Mills Sheringham Point Light

Sooke Bay, located 5 miles E of Sheringham Point, lies on the E side of Otter Point. A small lagoon at the head of this bay is used as a booming ground. A privately-maintained entrance channel leads to this lagoon. A conspicuous building is reported to stand on the W side of the lagoon. The bay is shoal in its E part; however, anchorage can be taken during fine weather, in a depth of 14.6m, about 0.5 mile offshore.

1.4 Sooke Harbor (48°22'N., 123°43'W.) (World Port Index No. 18690) is entered from Sooke Inlet by passing through a fairway with a least depth of 4.2m. The entrance, which may best be seen on the chart, is marked by a light and indicated by ranges; however, local knowledge is necessary. The harbor is mainly used by fishing vessels, tugs, and barges. There are several small wharfs, with depths up to 3m alongside.

Anchorage can be taken, in depths of 9 to 18m, within the inlet, about 0.5 mile off the harbor entrance points. Anchorage, in depths 11 to 14m, can be taken within the harbor, about 0.2 mile N of the light marking the E extremity of Whiffin Spit.

Beechey Head (48°19'N., 123°39'W.), marked by a monument, is a conspicuous point.

Becher Bay (48°19'N., 123°37'W.) is entered between Beechey Head and Church Point, 2.8 miles E. Frazer Island lies in the E part of this bay. It is the largest of many islands lying on rocky shoals which fringe the sides of the bay. Several mooring buoys, used for securing log booms, are situated in the NE part of the bay. The tidal currents in this area are strong and irregular, and tide rips form off the entrance points. During the summer months, floats forming two marinas are moored within the bay.

Sheltered anchorage can be taken, in a depth of 27m, about 0.3 mile NE of Frazer Island.



Top and bottom left photo copyright Mike Mitchell Race Rocks Light

Christopher Point, low and steep, is located 1 mile E of Church Point. A gunnery control station is situated on this point.

Bentinck Island (48°19'N., 123°33'W.), 46m high, lies centered 0.8 mile ENE of Christopher Point.

Approaches to Victoria Harbor and Esquimalt Harbor

1.5 Race Rocks (48°18'N., 123°32'W.), a group of low and bare rocks, lie between 0.5 mile and 1.5 miles SE of Bentinck Island. A light is shown from a tower standing on Great Race Rock, the highest of the group; a lighted buoy marks Rosedale Rock, the outermost danger.

Race Passage (48°19'N., 123°32'W.), with a least depth of 11m, leads between Race Rocks and Bentinck Island. Due to

kelp, the island should be passed at a distance of at least 0.3 mile. Dangerous races and overfalls are prevalent in the passage during stormy weather. Although deep, this passage should not be used by large vessels.

Constance Bank (48°21'N., 123°22'W.), with a least depth of 15.4m, lies about 7.5 miles NE of Race Rocks. Heavy tide rips occur over the rocky, shoal areas of this bank. Anchorage is not recommended in the vicinity of this bank.

Hein Bank (48°21'N., 123°03'W.), lying about 20 miles E of Race Rocks, has a least depth of 4.1m. It is marked by a lighted buoy equipped with a racon. Thick kelp covers the shallowest part of this bank.

Caution.—Overhead cables, with a vertical clearance of 9.8m, span Eemdyk Passage, near the S end of Bentinck Island.

Pedder Bay to Victoria Harbor

1.6 Pedder Bay (48°20'N., 123°32'W.) is entered 2 miles N of Race Rocks. Cape Calver and Ned Point, about 0.8 mile apart, form the entrance of this bay.

Manor Point (48°20'N., 123°33'W.) is located 0.5 mile NW of Cape Calver. A prominent yellow beacon stands about 0.2 mile NW of this point. A pier is situated near the point and provides a berth, 80m long, with a depth of 7.6m alongside. Anchorage can be taken, in a depth of 9m, sand, about 0.5 mile NNW of Cape Calver. This anchorage is unsafe during SE gales.

William Head, a low promontory, is located close N of Ned Point. The conspicuous buildings of a penitentiary stand on this promontory.

Parry Bay (48°22'N., 123°31'W.) indents the coast between William Head and Albert Head, 3.3 miles NE. The shores of this bay are steep-to and open to E weather. Mary Hill, rising 0.8 mile W of Albert Head, is a prominent landmark. Anchorage, sheltered from W winds, can be taken, in a depth of 11m, mud, about 0.5 mile N of William Head.

Caution.—Vessels should keep clear of target buoys and ships running speed trials in the vicinity of the entrance to Parry Bay.

A submarine cable lies in Parry Bay. Anchorage is prohibited in the N part of Parry Bay.

Vessels should not approach within 0.1 mile of William Head unless authorized.

1.7 Albert Head (48°23'N., 123°29'W.), a salient headland, forms the S end of Royal Roads, which extends NNE to the entrance of Esquimalt Harbor. This headland is wooded, except for its E extremity, which is bare. A conspicuous gravel pit and a pier are situated 1.3 miles N of the headland.

The W shore, forming the roads, consists of sand and gravel. It is backed by sand cliffs extending N to a peninsula fronting a lagoon. The roads, with a least depth of 16.5m, are clear of dangers except for Coghlan Rock, lying about 0.2 mile N of the headland, and a shoal patch, with a depth of 14.6m, lying about 0.8 mile E of the headland.

A prominent radio tower is reported to stand on a hill about 2.5 miles NW of Albert Head.



Photo copyright Mike Mitchell

Albert Head

Victoria Harbor (48°25'N., 123°24'W.)

World Port Index No. 18670

1.8 Victoria Harbor, protected and landlocked, is entered about 2 miles SE of Esquimalt Harbor. This busy harbor is icefree and accommodates large ocean-going ships.

Winds—Weather.—The strongest and most frequent gales blow from SE and SW. They rarely blow from NW. Winds from the SE blow between November and March, with a strong gale occurring about once a month. Such gales are usually accompanied by rain and thick weather. Winds from the NE rarely blow with much strength and always brings good weather.

It is not unusual to find dense fog in the Strait of Juan de Fuca and clear weather to the N of Race Rocks. Local fog is usually dispelled by noon.

Tides—Currents.—The set and rates of the tidal currents are variable and uncertain in the approaches to Victoria Harbor and Esquimalt Harbor. At the entrance to Victoria Harbor, off Macaulay Point, the flood current sets E and the ebb sets W, with varying velocities. A similar situation prevails at the entrance to Esquimalt Harbor, although the currents are weaker and more variable in direction than off Macaulay Point.

Depths—Limitations.—Only the wharves situated on the E side of the harbor, between Ogden Point and Shoal Point, can accommodate ocean-going vessels.

Pier A, situated close within the breakwater at Ogden Point, provides 305m of berthage on its S side, with alongside depths of 10.7m, and 244m of berthage on its N side, with alongside depths of 9.8 to 10.7m. The pier has a minimum depth of 10.7m alongside, except at its E end, where there is a depth of 9.8m. It is mostly used for wood and paper products.

Pier B, also situated at Ogden Point, provides 244m of berthage on its N side, with depths of 10.7 to 12.4m alongside,

and 244m of berthage on its S side, with depths of 9.4 to 11.3m alongside. The N side of this pier is used mainly for loading grain; the S side is used for loading timber.

The Canadian Coast Guard Wharf is situated close S of Shoal Point. It is 220m long and has depths of 3.1 to 9m alongside.

Island Research Wharf, situated close E of Shoal Point, has a least depth of 4.6m alongside. An L-shaped wharf, lying close E of Island Research Wharf, provides a berth, 30m long, on its outer side, with a depth of 5.8m alongside. A fuel float lies at the end of this wharf.

The facilities of Capital City Shipyards and Oakland Industries are situated close E of Raymur Point.

B.C. Steamships Wharf, situated on the W side of James Bay, is 148m long and has a least depth of 3.4m alongside.

Ship Point Wharf, situated on the NE side of James Bay, provides a berth, 155m long on its SW side, with depths of 4.5 to 6m alongside.

The controlling depth in the harbor entrance is 18.3m. A minimum depth of 13.7m was reported (1970) to lie in the fairway of the Outer Harbor, 0.3 mile within the entrance. Vessels of up to 44,800 dwt, 240m in length, and 10.7m draft have been accommodated within the outer harbor.

Large vessels are accommodated within the outer harbor. The inner harbor is used by ferries, fishing vessels, small craft, and yachts.

Brotchie Ledge, the only off-lying danger in the approaches, lies 0.5 mile SSE of the breakwater head and is marked by a light. A patch, with a depth of 8.5m, lies about 0.4 mile NW of the breakwater head.

Aspect.—The harbor is entered between Macaulay Point, on the W side, and a breakwater extending seaward from Ogden Point, on the E side. An approach fairway lighted buoy,

equipped with a racon, is moored about 2.3 miles S of the breakwater head.

A conspicuous grain elevator stands on Pier B and several prominent oil tanks are situated on the W side of the harbor entrance.

The Dominion Astrophysical Observatory, with a conspicuous dome, stands on Observatory Hill (48°31'N., 123°25'W.).

At night, the illuminated skyline of the city of Victoria is conspicuous from seaward. A dome, with a conspicuous gilded figure, stands on the Parliament Building.

Pilotage.—Pilotage is compulsory for vessels over 350 grt. Pilots may be contacted on VHF channel 17 and board in the vicinity of VH Lighted Buoy.

Vessels should send a request for pilotage, along with its ETA, 48 hours, 24 hours, 12 hours, and 4 hours in advance. The 48-hour message should include the following information:

- 1. Vessel name and call sign.
- 2. Beam, draft, trim, and loa.
- 3. Speed and propeller characteristics.
- 4. Destination.

Vessels must send an ETA, at the boarding place, at least 12 hours prior to arrival. A confirmation or correction message must also be sent 4 hours prior to arrival.

Pilot vessels on duty may sound four short blasts as a recognition signal, in addition to the usual prescribed signals.

The limits of Victoria Harbor are designated as all waters to the N of an imaginary line joining the S extremities of Albert Head and the Trial Islands (48°24'N., 123°18'W.). Esquimalt Harbor is excluded.

Regulations.—Marine traffic in Victoria Harbor has increased over the past few years. Special rules, procedures, and restrictions apply to all vessels and seaplanes operating in Victoria Harbor. Persons failing to comply with these rules and restrictions may be subject to summary conviction and/or fines. The **Victoria Harbor Traffic Scheme** is not a "traffic separation scheme" as defined in Rule 10 of the Collision Regulations. Authority is derived from the Canada Marine Act.

For the purposes of this traffic scheme, Victoria Harbor may be considered in four parts, as follows:

- 1. Outer Harbor—extends from the breakwater to Shoal Point.
- 2. Middle Harbor—extends from Shoal Point to Laurel Point.
- 3. Inner Harbor—extends from Laurel Point to the Johnson Street Bridge.
- 4. Upper Harbor—extends N of the Johnson Street Bridge.

Two unmarked Seaplane Take Off and Landing Areas are located in the middle of the Middle Harbor and extend into the Outer Harbor area.

Two Inbound/Outbound Traffic Lanes are located on the S side of the Middle Harbor and extend into the Outer Harbor area. The E portion of the division between the outbound and the inbound traffic lanes is marked with three cautionary lighted buoys.

The is a speed limit of 5 knots in Victoria Harbor inside a line from Shoal Point to Berens Island and a speed limit of 7 knots outside the same line.

Proceeding under sail to the N of a line extending between Shoal Point and Berens Island Light is prohibited.

Power driven vessels less than 20m in length, including sailboats, are to transit the Middle Harbor via the vessel Inbound/Outbound Traffic Lanes.

Power driven vessels 20m in length or greater are to transit the Middle Harbor via the Seaplane Take Off and Landing Areas.

All vessels entering or exiting the Inbound/Outbound Traffic Lanes should merge gradually into the appropriate W traffic lane. All vessels should avoid crossing traffic lanes. However, if the crossing of a traffic lane is unavoidable, vessels should cross at right angles to the traffic lane.

All vessels navigating in the area between Songhees Point and Laurel Point, near the Inbound/Outbound Traffic Lanes, should use extreme caution. Additional caution is also required in the area between Berens Island and Shoal Point, where traffic from West Bay, the Middle Harbor, and the Outer Harbor all converge near the N/S Seaplane Take Off and Landing Area.

Aviation procedures require that pilots take-off southbound in the north/south Seaplane Take Off and Landing Area. Landings will most likely occur either eastbound in the east/ west Seaplane Take Off and Landing Area or northbound in the north/south Seaplane Take Off and Landing Area. However, wind, water, and aircraft load conditions may be such that aircraft may take off or land in either area and/or in either direction.

A Seaplane Inclement Weather Operating Area in West Bay may be used for take off in some high wind conditions. Because of varying weather conditions, mariners should not count on pilots always being able to operate completely within the designated areas. Therefore, mariners must remain vigilant at all times. To aid mariners, three white strobe lights, located at Shoal Point, Laurel Point, and Pelly Island, are activated by the Flight Service Station up to 60 seconds prior to a seaplane taking off or landing. Also, seaplanes so equipped will normally activate onboard landing/pulsating lights prior to take off.

Aircraft may have to leave the Seaplane Take Off and Landing Areas to make way for other planes and may use the Inbound/Outbound Traffic Lanes until they are able to return to the Seaplane Take Off and Landing Areas

An Aircraft Holding Area, located SE of Laurel Point, has been designated for one seaplane to hold for short periods while waiting for a berth at one of the seaplane docks.

Aircraft operate in Victoria Harbor from 0700 local time until 30 minutes past sunset.

Anchorage.—Anchorage can be taken, in depths of 18 to 42m, good holding ground, in the designated areas within Royal Roads. Anchorage within the roads but outside of the designated areas, which may best be seen on the chart, is prohibited. Anchoring is also prohibited in James Bay.

Anchorage is available within the outer harbor but is not recommended during the winter.

Anchoring is prohibited without permission of the Harbormaster.

Caution.—Submarine cables cross the harbor to the N of Work Island, between Laurel and Songhees Point, and close N of the Johnson Street Bridge.



Photo copyright Mike Mitchell

Berens Island Light

A Traffic Separation Scheme (TSS) lies in the approaches to Victoria Harbor and may best be seen on the chart. Lighted buoys, marking the separation zones of this TSS, are moored about 3.8 miles S and 3.3 miles SE of Race Rocks Light.

Esquimalt Harbor (48°26'N., 123°26'W.)

World Port Index No. 18680

1.9 Esquimalt Harbor is entered between Duntze Head and the lighted buoy moored close E of Fisgard Island. It extends N for 1.8 miles. A navy base is situated within the harbor and numerous naval installations line the NE shore. There are also several commercial repair and refit facilities.

Winds—Weather.—The winds and currents are similar to those described for Victoria Harbor in paragraph 1.8. Winds from S seldom blow, but strong SW and W winds often make berthing difficult.

Depths—Limitations.—Jetty A and Jetty B, situated on the S side of Constance Cove, are part of the Canadian Forces Base Esquimalt. They are used for the berthing of military, government, and visiting naval vessels.

Jetty A has a berth, 230m long, on its N side, with depths of 8.4 to 9.1m alongside. Its E side has a berth, 60m long, with depths of 3.3 to 8.4m alongside.

Jetty B, situated close E of Jetty A, has a berth, 183m long, on its E side, with depths of 4.7 to 10.2m alongside. Its W side has a berth, 90m long, with depths of 3.2 to 10.3m alongside.

Jetty C consists of two piers, each 137m long. The least depth lying between the piers is 6.9m. The W side of the westernmost pier has depths of 7.6 to 11.7m alongside.

Yarrows Jetty A, situated in the SE part of Constance Cove, is used for ship repair work. It has a berth, 152m long, on its NE side, with depths of 4.5 to 4.8m alongside.

Yarrows Jetty B lies close W of Yarrow Jetty A and is also used for ship repair work. It has 120m of berthage on each side, with depths of 6.2 to 8.5m alongside the SW side and 4.3 to 7.3m alongside the NE side.

Jetty D is situated close N of Yew Point, on the W side of the harbor. It provides 137m of berthage and has a depth of 6.4m alongside the N side and 3 to 5.5m alongside the E side.

Jetty E, situated in the NE part of Constance Cove, has a berth, 290m long, with depths of up to 9.2m alongside. It is used mainly by government weather and survey vessels.

Jetty F, situated 0.3 mile N of Yew Point, is a bunkering jetty for naval and other government vessels. Its N side has 244m of berthage, with depths of 5.6 to 10m alongside. Its S side has 198m of berthage, with depths of 7 to 10m alongside.

Jetty G (Colwood Jetty), situated close N of Jetty F, is T-shaped. It has 60m of berthage, with a mean depth of 7.9m alongside. This jetty is reserved for military and government vessels.

Government Graving Dock Landing Wharf is situated on the N side of Constance Cove. It is 290m long and has a least depth of 9.1m alongside. This wharf is used for heavy lifts.

Government Graving Dock is 357m long. It has a width at the entrance of 41m and a depth of 12.2m at MHWS over the sill.

There is a controlling depth of 14.6m in the harbor entrance. Depths decrease gradually from the entrance to the drying head. Vessels up to 314m in length and 10.7m draft have been accommodated.



Main photo courtesy J. Kandik; inset copyright Chris Mills

Fisgard Light



Photo copyright Mike Mitchell

Fiddle Reef Light

Deep-draft vessels must avoid a shoal patch, with a least depth of 8.2m, lying about 0.3 mile SSE of Scroggs Rocks Light.

Brothers Islands, lying close SE of Scroggs Rocks, should not be approached within 0.3 mile.

Aspect.—The harbor opens out inside the entrance and provides a sheltered, ice-free anchorage.

Fisgard Island, the W entrance point of the harbor, is located 3 miles NNE of Albert Head. This island is bare and connected to the mainland by a causeway. A sector light is shown from a structure standing on the island and a prominent red house is situated close N of it. A lighted buoy moored close E of the island marks the edge of a shoal area.

Three conspicuous tower cranes are visible from the approaches. Two stand at the naval dockyard, close NE of Duntze Head; the third stands at the graving dock, 0.5 mile NE of Duntze Head.

A range, which may best be seen on the chart, indicates the harbor entrance.

Duntze Head, located 0.3 mile E of Fisgard Island, forms the E entrance point of the harbor.

Scroggs Rocks, two drying rocks, lie about 0.3 mile S of Duntze Head and are marked by a lighted beacon.

The red directional sector of Fisgard Light indicates all the dangers lying on the E side of the approach to the harbor.

Pilotage.—Pilotage is compulsory. Pilots board about 1 mile S of Fisgard Light. For further information, see Pilotage for Victoria Harbor in paragraph 1.8. The Royal Canadian Navy provides assistance to visiting naval ships.

Regulations.—The harbor limits are designated as all tidal water lying N of the latitude of the S extremity of the Brothers Islands.

All inbound and outbound vessels are requested by the Harbormaster to advise the Port Operations Center, on VHF



Main photo courtesy of J. Kandik; top inset copyright Mike Mitchell

Trial Island Light

channel 10, of their position before crossing the area between Fisgard Island and Duntze Head, at the entrance to Esquimalt Harbor.

For further information, see Regulations for Victoria Harbor in paragraph 1.8.

Anchorage.—Sheltered anchorage, with good holding ground, can be taken, in a least depth of 7.3m, as far N as Dyke Point (48°27'N., 123°26'W.). Constance Cove is reserved as a naval anchorage.

Caution.—When approaching Esquimalt Harbor from the E during daylight hours, vessels, after executing their starboard turn, should take care to identify the correct range marks. It is reported that some confusion may exist due to nearby beacons.

Haro Strait—Southwest Approach

1.10 Numerous islets, rocks, and shoals lie in the vicinity of the Trial Islands, Vancouver Island, and the off-lying Discover-Chatham Islands group. Several navigable passages lead between these dangers. However, local knowledge is essential because most of these dangers are unmarked and the currents in the area are quite strong.

Ocean-going vessels should proceed to the S of the above dangers and pass E of Discovery Island. Local coastal vessels and small craft sometimes pass through the inside passages.

Caution.—A Traffic Separation Scheme (TSS), which may be best seen on the chart, is situated S of the Trial Islands.

Trial Islands (48°24'N., 123°18'W.), bare and rocky, front the coast about 3.5 miles ESE of Victoria Harbor. Strong tide rips occur, especially on the flood, near the S extremity of these islands. The southernmost island is marked by a light and four radio towers, each 56m high, stand at its center.

Clover Point (48°24'N., 123°21'W.) and Gonzales Point (48°25'N., 123°18'W.) form the extremities of the foul foreshore extending WNW and NNE of the Trial Islands. Clover Point can be identified by a large parking area on it. A prominent water tower, illuminated at night, stands 1.3 miles NNE of Clover Point; a conspicuous apartment building is situated close N of it. A prominent white dome and a historic monument are situated on Gonzales Point.

1.11 Cadboro Point (48°27'N., 123°16'W.), a prominent and rocky headland, is located 2.8 miles NNE of Gonzales Point. Oak Bay and Cadboro Bay indent the coast between these points. Marinas are situated in both of these bays. They are open, but provide shelter to small vessels with local knowledge.

Anchorage within Oak Bay can be taken, in a depth of 9m, between Mary Tod Island and **Cattle Point** (48°26′N., 123°18′W.), except during SE gales. This anchorage can be approached from the N or S of **Fiddle Reef** (48°26′N., 123°17′W.). However, vessels must avoid Tod Rock, which dries and is marked by a beacon, lying close NW of the reef.

Anchorage within Cadboro Bay can be taken, in a depth of 8.2m, good holding ground, near the entrance.

Enterprise Channel (Trial Island Pass), leading between Trial Island and the coast, has a least depth of 6.1m. Mouat Reef, marked by kelp, lies close E of the fairway entrance.

Mayor Channel is entered from the S about 0.5 mile E of Gonzales Point. This passage is most frequently used by vessels with local knowledge enroute to Haro Strait. It is about 0.3 mile wide at its narrowest part. Great Chain Island, Harris Island, Fiddle Reef, and Lewis Reef lie along the sides of this passage. A small bank, with a least depth of 7m, lies in midchannel, between Thames Shoal and Great Chain Island.

Brodie Rock (48°24'N., 123°17'W.) lies in the S approach to Mayor Channel. Lights are shown from structures standing on Fiddle Reef and Lewis Reef.

Baynes Channel, extending between Cadboro Point and the **Chatham Islands** (48°26'N., 123°15'W.), leads from Mayor Channel into Haro Strait. This channel has a least depth of 7.3m and is clear of dangers, except for an unmarked shoal patch, with a depth of 4.5m, lying in mid-channel. Heavy tide rips often occur within this channel. Baynes Channel North Light is shown from a tower standing on an islet lying 0.3 mile SSE of Cadboro Point.

Hecate Passage and Plumper Passage also lead into Baynes Channel, E of Mayor Channel. Local knowledge is required to transit these passages.

Caution.—Several submarine cables, which may best be seen on the chart, extend between the Trial Islands and Vancouver Island.

Several submarine cables, which may best be seen on the chart, lie in Baynes Channel, between Cadboro Point and the Chatham Islands.